

Executive Summary

After visiting BFF and looking at their processes, TREE team members researched ways for BFF to reduce water use and discharge. Many water saving options were considered; feasible opportunities with the greatest impact were selected. The opportunities and numbers in this report are for the regular shredding line only (this was the line operating during the assessment). However, many of these techniques and savings can be carried over to other process lines.

| Opportunities | Projected savings |
|---|-------------------|
| #1 Heating defrost water and #2 Reusing defrost water..... | 24,900 GPD |
| #3 Transporting waste solids without water..... | 51,800 GPD |
| #4 Keeping hydrocooler water with potatoes..... | 8,300 GPD |
| #5 Monitoring fresh feed to trim table to eliminate overflow..... | 10,000 GPD |
| #6 Cleaning floors with low volume spray and brooms..... | 6,100 GPD |
| #7 Changing operations on de-water 3..... | 16,400 GPD |
| #8 Using defrost water in raw receiving..... | 4,000 GPD |

Total savings (based on an initial flow of 168,000 GPD¹).....121,500 GPD

(more than a 70% reduction)

| Process Unit | Total Flow [Gal Per Day] | With TREE conservation ideas implemented [Gal Per Day] |
|--------------------------------------|---------------------------------|---|
| Raw Receiving Fill Up ² | 4,000 | 0 |
| Steam Peeler | 4,320 | 4,320 |
| Barrel wash | 7,200 | 7,200 |
| Slabber | 1,440 | 1,440 |
| Trim Table Reject Stream | 7,200 | 7,200 |
| Trim Table Overflow | 11,520 | 1,440 |
| Blancher 1 | 7,776 | 7,776 |
| Blancher 2 | 6,091 | 6,091 |
| Hydro-cooler loss at splitter | 9,792 | 1,440 |
| De-water 3 in Packaging | 17,856 | 1,440 |
| Spiral Freezer defrost/wash water | 19,875 | 4135 |
| Freezing Tunnel | 12,480 | 3944 |
| Small Hose | 7,015 | 864 |
| Large Hose | 51,840 | 0 |
| Total gal per day¹ | 168,405 | 47,290 |

1. All flow estimates were conservative, so actual daily flow for the process is higher.
2. Normalized over the entire 10-day operating cycle.